The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Applicants gratefully appreciate the indication in the December 31 Notice of Allowance that claims 1-55 define patentable subject matter. Applicants respectfully submit that claims 11-20, 22-34 and 40-54 remain in condition for allowance. Favorable consideration and allowance of claims 11-20, 22-34 and 40-54 is respectfully solicited.

However, upon review of the allowed claims, applicants believe that claims 1-11, 21, 35-39 and 55 are unduly narrow due to the respective features of the optical recording material (claims 1, 35 and 37), the material (claim 21) and the optical recording layer (claims 39 and 55) "having at least one of a polymer or a liquid crystal polymer" that are recited in these claims as allowed. Applicants do not believe that these respective features are needed in claims 1-11 21, 35-39 and 55 to define patentable subject matter, or to distinguish the subject matter of these claims from the cited references.

Accordingly, Applicants have broadened claims 1-11, 21, 35-39 and 55 by deleting the respective feature from each of claims 1, 21, 35, 37, 39 and 55. These features deleted from claims 1, 21, 35, 37, 39 and 55 are now set forth in claims 57-61 and 56, respectively. Applicants respectfully submit that claims 56-61 are allowable as these claims correspond to claims 55, 1, 21, 35, 37 and 39, respectively, which were previously allowed. Applicants respectfully submit that claims 1-11, 21, 35-39 and 55 also remain in condition for allowance even in view of these broadening amendments. Favorable consideration and allowance of claims 1-10, 21, 35-39 and 55-61 is respectfully solicited.

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-61 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number set forth below.

Respectfully submitted,

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Stephen J. Roe
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JAO:SJR/jam

Attachment:
Appendix

Date: March 26, 2003

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION
Please grant any extension necessary for entry;
Charge any fee due to our Deposit Account No. 15-0461

APPENDIX

Changes to Claims:

Claims 56-61 are added.

The following is a marked-up version of the amended claims:

1. (~~Five~~Six Times Amended) An optical recording medium, comprising at least one optical recording layer, the optical recording layer including an optical recording material ~~having at least one of a polymer or a liquid crystal polymer~~ that changes a state of photo-induced birefringence in response to a recording light that is externally controlled from the optical recording medium to rotate a polarization angle of the recording light, a portion of the recording layer that changes a state of photo-induced birefringence substantially acting optically as a half-wave plate; and

a substrate which sustains the optical recording layer,

wherein an azimuth of the half-wave plate within the optical recording medium is multilevel-modulated so that information is recorded on the optical recording medium by the recording light.

21. (~~Five~~Six Times Amended) An optical recording medium, comprising an optical recording layer that includes a material ~~having at least one of a polymer or a liquid crystal polymer~~ in which an azimuth of birefringence that is induced by a recording light externally controlled from the optical recording medium to rotate a polarization angle of the recording light changes in response to a rotation of the polarization angle of said recording light; and

a substrate which sustains the optical recording layer,

wherein an azimuth of the optical recording layer is multilevel-modulated so that information is recorded on the optical recording medium by the recording light.

35. (~~Five~~Six Times Amended) An optical recording medium, comprising an optical recording layer including an optical recording material ~~having at least one of a polymer or a liquid crystal polymer~~ that stores multilevel information using a light induced birefringence that acts optically as a half-wave plate, an orientation of an azimuth of birefringence formed by a recording light representing the multilevel information, the recording light externally controlled from the optical recording medium to rotate a polarization angle of the recording light; and

a substrate which sustains the optical recording layer,

wherein the azimuth of birefringence formed by the recording light is multilevel-modulated so that information is recorded on the optical recording medium by the recording light.

37. (~~Five~~Six Times Amended) An optical recording medium, comprising an optical recording layer including an optical recording material ~~having at least one of a polymer or a liquid crystal polymer~~ that stores multilevel information using a light induced birefringence that acts optically as a quarter-wave plate, ~~a~~an orientation of an azimuth of birefringence induced by controllably rotating a polarization angle of a recording light externally from the optical recording medium that represents the multilevel information; and

a substrate which sustains the optical recording layer,

wherein the orientation of the azimuth of birefringence is multilevel-modulated so that information is recorded on the optical recording medium by the recording light.

39. (~~Five~~Six Times Amended) An optical recording medium, comprising an optical recording layer ~~having at least one of a polymer or a liquid crystal polymer~~ in which an azimuth of birefringence induced by controllably rotating a polarization angle of a

recording light externally from the optical recording medium is multilevel-modulated and recorded in response to a rotation of a polarization angle of said recording light; and

a substrate which sustains the optical recording layer;

wherein the azimuth of birefringence is multilevel-modulated so that information is recorded on the optical recording medium by the recording light.

55. (~~Five~~Six Times Amended) An optical recording medium, comprising an optical recording layer ~~having at least one of a polymer or a liquid crystal polymer~~ in which an optical element is formed by a recording light that is externally controlled from the optical recording medium to rotate a polarization angle of the recording light, the optical element having an azimuth of birefringence and acting on reproducing light to adjust a polarization angle of the reproducing light by an amount greater than a difference between a polarization angle of the recording light used to form the optical element and a polarization angle of the reproducing light before the reproducing light is acted on by the optical element; and

a substrate which sustains the optical recording layer,

wherein the reproducing light is directed onto the optical recording medium after the azimuth of birefringence of the optical element has been multilevel-modulated so that recorded information can be reproduced.